

LINKS:

ALL

Scholarly Metrics LibGuide

<http://guides.library.jhu.edu/metrics>

MARK

Journal Citation Reports

<http://jhsearch.library.jhu.edu/databases/proxy/JHU04588>

Eigenfactor.org

<http://eigenfactor.org/>

ROBIN

<http://www.plosbiology.org/article/info%3Adoi%2F10.1371%2Fjournal.pbio.1000305>

<http://www.nature.com/nature/journal/v491/n7422/full/nature11632.html>

TAHIRAH

<http://www.google.com/intl/en/scholar/citations.html>

<http://apps.webofknowledge.com>

MARK

Publish or Perish

<http://www.harzing.com/pop.htm>

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## **Scholarly Metrics**

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The Sheridan Libraries

Johns Hopkins University

Got impact? Please join us as we navigate the complicated waters of what we're calling "scholarly metrics". Assess the scholarly impact of journals, of individual research articles, and of individual researchers. We'll show you how to show researchers at your institution how to assess the impact of research in their fields and how to locate and interpret the various metrics that attempt to assess their own individual research and levels of productivity. What's an "H-Index"? Come see!

Audience: Academic librarians predominantly from non-research-intensive institutions

Outline for 75 minute session that leaves 25 minutes for Q&A:

1. Introduction: [5-7 minutes]

Scholarly Metrics: What it is and why it's important (Robin)

Our LibGuide (Robin)

Our history of giving scholarly metrics presentations to faculty at Johns Hopkins (Robin)

Tenure and promotion (Tahirah)

2. Journal metrics (Mark) [5 minutes]

Let me start by saying a little something about The Crucial Importance of the Citation...

In the mid-1950s, American linguist Eugene Garfield had an epiphany about scientific and scholarly literature: Citation patterns in the literature could be identified and quantified, and by doing this works of high and lasting impact could be exposed and recognized. We could and should say that the field of scholarly metrics began with this key insight.

As a piece of scholarly apparatus, the citation stands as a central artifact of value. Scholars and scientists typically use the citation to serve both as a proxy to a cited work and also as a positive judgment of that work. We typically cite those works that we either agree with, or, barring agreement, those works that we think are important.

That is the typical case. But the citation is ambiguous. Sometimes a work is cited as being a strong negative example.

Case in point:

In 1996 prominent New York University physicist Alan Sokal published a paper in what was then one of the top journals in the field of cultural studies, *Social Text*. The title of his paper was, “Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity.” And the contents of this paper were pure, fabricated nonsense. The point of the so-called “Sokal Hoax” was to show that an authoritative academic figure using the fashionable idiom of the time could get a nonsensical paper published in a top journal. He was successful. And his paper was cited over and over again.

The citation is ambiguous. Most of the time it has a positive connotation; some of the time it has a negative connotation. But it is almost always important. The citation is a central unit of value in the scholarly and scientific world.

Personal anecdote: I once had one of my graduate school professors cite a paper of mine in a book he had written. When I found out about this, I clipped a cartoon from *The Chronicle of Higher Education* and sent it to him. The cartoon showed two guys with a journal open in front of them. The one guy exclaims, “Hey look, you’ve been cited! You’re on your way to becoming an important footnote!”

So journal metrics...

Journal metrics attempts to answer the question, especially important to graduate students and junior faculty, “What are the top journals in my field or sub-field?” Most graduate students and faculty will have an intuitive grasp of what the top journals are, but journal metrics attempts to quantify and thereby either confirm or deny the veracity of such intuitions.

Let's see how this works, let's do a search!

## **Journal Citation Reports (JCR)**

<http://jhsearch.library.jhu.edu/databases/proxy/JHU04588>

Choose the latest Social Sciences volume

Search for "Education and Educational Research"

Returns an alphabetical list. Useful for seeing which journals are indexed under this category.

Sort by "Impact Factor"

Column definitions:

- Total Cites:

Total citations to the journal in this year.

- **Impact Factor:**

Citations to articles from the most recent two full years, divided by the total number of articles from the most recent two full years. "How much is this Journal being cited during the most recent two full years?"

- 5-year impact factor:

Citations to articles from the most recent five full years, divided by the total number of articles from the most recent five full years. "How much is this Journal being cited during the most recent five full years?"

- Immediacy index:

Citations to articles from the current year, divided by the total number of articles from the current year. "How much is this Journal being cited during the current year?"

- Total Articles:

Total number of articles published in the journal this year.

- Cited Half Life:

For the current Journal Citation Reports year, the median age of Journal articles cited. "What is the duration of citation to articles in this Journal?"

- **Eigenfactor Score:**

Citations to articles from the most recent five full years, divided by the total number of articles from the most recent five full years, and excluding Journal self-citations.

Article Influence Score:

The Eigenfactor score divided by the number of articles published in Journal. "I know how impactful the Journal as a whole is, but what about the average individual article in the Journal?"

## **Eigenfactor.org**

Search for specific journal: *Journal of Educational Research*

Charts/graphs

Search for specific journal: *Information Technology and Libraries*

The Spike: What was going on in 2006?!

Toward a twenty-first century library catalog

Author(s): [Antelman, K](#) (Antelman, Kristin); [Lynema, E](#) (Lynema, Emily); [Pace, AK](#) (Pace, Andrew K.)

Source: INFORMATION TECHNOLOGY AND LIBRARIES Volume: 25 Issue:

3 Pages: 128-139 Published: SEP 2006

Times Cited: [38](#) (from Web of Science)

### 3. Article metrics (Robin) [5 minutes]

PLOS

Web of Science

### 4. Author metrics (Tahirah) [5 minutes]

Google Scholar

Web of Science

## 5. Alt Metrics (mention/definition) (Mark)

The best definition of Alt Metrics is to be found in the Alt Metrics Manifesto, a citation to which appears in the handout. In short, Alt Metrics attempts to assess impact via various social media technologies, for example, “Likes” in Facebook, hits on blog posts, Tweets and re-Tweets.

It is my opinion that such a technique is very good at determining the immediacy of a piece of research or whether it’s popular at the moment. But current popularity and long term impact are two different things. For all we know a particular piece of research may be a one-hit wonder, the “My Sharona” of the scholarly and scientific worlds.

Alt Metrics: Good for assessing immediacy; not so good for assessing long term impact.

## 6. The Chart (Mark)

### 7. Disciplinary Differences

Sciences – Robin

Social Sciences – Tahirah

Humanities – Mark

The focus thus far has been on citations to journal articles. However, the monograph remains the coin-of-the-realm in the humanities. There currently is not such a focus on citations to books as there are to journal articles. Barring this, one can attempt to quantify the impact of individual books by noting the number of reviews that have appeared. This, however, is nowhere near as granular as tracking citations. What is needed is an information resource that specifically tracks citations to and among monographic publications. Luckily, Thomson-Reuters has

just published one! We have high hopes for the new Book Citation Index and look forward to its focus on covering monographs in humanities disciplines.

Book Citation Index<sub>SM</sub> — from 2005 to present

Fully indexes over 30,000 editorially selected books in the sciences, social sciences and humanities, with 10,000 new books added each year

18% of the Book Citation Index is devoted to monographs in the Arts and Humanities

7. Conclusion: What academic librarians should be doing with Scholarly Metrics (All) [7 minutes >]

The Limitations: No database is global; discipline differences; different metrics yield different numbers!

Other FREE tools: Publish or Perish (Mark) E.g., "Cyzyk"!